



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,960	12/05/2001	Mariko Matsui	214807	1810

23460 7590 07/31/2003

LEYDIG VOIT & MAYER, LTD
TWO PRUDENTIAL PLAZA, SUITE 4900
180 NORTH STETSON AVENUE
CHICAGO, IL 60601-6780

EXAMINER

SINGH, ARTI R

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 07/31/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/006,960	MATSUI ET AL.	
	Examiner	Art Unit	
	Ms. Arti Singh	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on initial filing on 12/05/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As the application appears to be a translated, there are many informalities that the Examiner believes would expedite prosecution if cleared up; In all the claims when referring to "fastened portion", the Examiner contends that Applicant is meaning the seams or where the fabric comes together. It is suggested that US terminology be used, such as seam or joint, just explain what is meant. Currently, it could read on a zipper or an adhesive, which could fasten the fabric together. In claim 3, the terms: boundary face" and "interlaced", could be changed to seam and woven, respectively. With regard to claim 7, or where the thickness is claimed, what is meant by this, do you mean cover factor? And by width which direction warp or weft? And lastly, with regard to the limitations of crimp factor if the width is unknown the crimp can't be determined.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-22 are rejected under 35 U.S.C. 102(b) as anticipated by USPN 6,220,309 issued to Sollars. Sollars invention relates to all-woven inflatable fabrics, which comprise

Art Unit: 1771

areas of two layers and attachment points or "seams" where single layers of fabric are formed. Such single fabric layers are constructed solely through the utilization of basket weave patterns. These specific single fabric layers provide a relatively effective manner of reducing air permeability within the entire fabric article by decreasing the possibility of yarn shifting upon inflation of the inflatable fabric. Alternatively, the presence of at least a second single fabric layer area adjacent to the first and separated by a narrow double fabric layer can further reduce the possibility of yarn shifting in the first single fabric layer area. Such a fabric may be utilized in numerous and various applications wherein fabric inflation is desired or necessary. In particular, the inventive fabric may be incorporated within an airbag cushion (column 1, lines 6-21). To achieve these and other objects and in accordance with the purpose of the invention, as embodied and broadly described herein, the invention provides an inflatable fabric comprising at least two layers of fabric in certain discrete areas of the fabric and at least one narrow single fabric layer at a discrete area within said fabric, wherein said at least one narrow single fabric layer is formed solely from a basket weave pattern of an even number of yarns, at most 12 yarns in width; preferably, and as well known to the skilled artisan in the fabric weaving industry, the weave structure for said single layer fabrics is a 2.times.2 basket weave pattern at most from 4 to 8 yarns in length. Also, this invention encompasses an inflatable fabric comprising at least two layers of fabric in certain discrete areas of the fabric and at least one single fabric layer at a discrete area within said fabric, wherein the weave diagram for such a fabric does not exhibit more than three consecutive unfilled blocks in any row or column. Furthermore, this invention also concerns an inflatable fabric comprising at least two layers of fabric in certain discrete areas of the fabric and at least one single fabric layer at a discrete area within said fabric, wherein only two separate weave densities are present within the entire fabric structure. The term

Art Unit: 1771

"inflatable fabric" is intended to encompass any fabric which is constructed of at least two layers of fabric which can be sealed to form a bag article. The inventive inflatable fabric thus must include double layers of fabric to permit such inflation, as well as single layers of fabric either to act as a seal at the ends of such fabric panels, or to provide "pillowed" chambers within the target fabric upon inflation. The term "all-woven" as it pertains to the inventive fabric thus requires that the inflatable fabric having double and single layers of fabric be produced solely upon a loom. Any type of loom may be utilized for this purpose, such as water-jet, air-jet, rapier, dobby, and the like. Jacquard weaving and dobby weaving, however, are most preferred.

The constructed fabric may exhibit balanced or unbalanced pick/end counts; the main requirement in the woven construction is that the single layer areas of the inflatable fabric exhibit solely basket-weave patterns. These patterns are made through the arrangement of at least one warp yarn (or weft yarn) configured around the same side of two adjacent weft yarns (or warp yarns) within the weave pattern. The resultant pattern appears as a "basket" upon the arrangement of the same warp (or weft) yarn to the opposite side of the next adjacent weft (or warp) yarn. Such basket weave patterns may include the arrangement of a warp (or weft) yarn around the same side of any even number of weft (or warp) yarns, preferably up to about six at any one time (column 4, lines 9-67).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 5,865,464 and USPN 6,488,311.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Arti Singh whose telephone number is 703-305-0291. The examiner can normally be reached on M-F 8:00am to 6:00 pm.

Art Unit: 1771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-873-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



ars
July 28, 2003

Ms. Arti Singh
Patent Examiner
Art Unit 1771